

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) A system for distributing at least one of information and photonic energy into at least one room of a building, comprising:
a lighting generator for generating visible light energy;
an infrared (IR) heat generator for generating IR heat energy; and
an optical fiber subsystem for transceiving at least one of the visible light energy and the IR heat energy into the at least one room, wherein the optical fiber subsystem carries the visible light energy, the IR heat energy and optical information signals;
a local transmit and receive element for separating the visible light energy, the IR heat energy and information signals;
a light lens/diffuser for diffusing or focusing the visible light energy into the at least one room;
a heat diffuser for diffusing the IR heat energy into the at least one room; and
a room illuminator/receiver for transceiving the information signals to and from the at least one room.

2. (original) The system for distributing at least one of information and photonic energy into at least one room of a building of Claim 1, wherein the optical fiber subsystem transmits optical information signals, radiates the optical information signals as optical wireless signals into the at least one room, and receives optical wireless signals from the at least one room.

3. (original) The system for distributing at least one of information and photonic energy into at least one room of a building of Claim 1, further comprising a data transfer subsystem for transceiving external information to and from the system.

4-5 (canceled)

6. (currently amended) The system for distributing at least one of information and photonic energy into at least one room of a building of Claim 5 1, wherein the room illuminator/receiver comprises:

- a combiner for combining the information signals of the optical fiber subsystem;
- a transmit amplifier connected to the combiner, for amplifying the information signals to be transmitted into the at least one room;
- a receive amplifier connected to the combiner, for amplifying the information signals received from the at least one room;
- a circulator for directing the information signals from the transmit amplifier and to the receiver amplifier; and
- an optical holograph diffuser for propagating and receiving optical wireless information signals into and from the at least one room.

7. (currently amended) The system for distributing at least one of information and photonic energy into at least one room of a building of Claim 5 1, wherein the room illuminator/receiver comprises a micro-electro mechanical system (MEMS) mirror subsystem for transceiving optical wireless information signals from multiple sources in the at least one room.

8. (original) The system for distributing at least one of information and photonic energy into at least one room of a building of Claim 1, wherein the lighting generator comprises:

- a lamp enclosure connected to the optical fiber subsystem; and
 - at least one lamp for generating the visible light energy,
- wherein the visible light energy is transferred to the optical fiber subsystem for transmission throughout the system.

9. (original) The system for distributing at least one of information and photonic energy into at least one room of a building of Claim 8, wherein the lamp enclosure further comprises an inner surface of highly polished material.

10. (original) The system for distributing at least one of information and photonic energy into at least one room of a building of Claim 1, wherein the IR heat generator comprises:

- a lamp enclosure connected to the optical fiber subsystem; and
- at least one infrared lamp for generating the IR heat energy,

wherein the IR heat energy is transferred to the optical fiber subsystem for transmission throughout the system.

11. (original) The system for distributing at least one of information and photonic energy into at least one room of a building of Claim 1, wherein the lighting generator and the IR heat generator are combined into one unit.

12. (currently amended) ~~The~~ A system for distributing at least one of information and photonic energy into at least one room of a building of Claim 1, ~~further~~ comprising:

- a lighting generator for generating visible light energy;
- an infrared (IR) heat generator for generating IR heat energy;
- an optical fiber subsystem for transceiving at least one of the visible light energy and the IR heat energy into the at least one room; and

- a heat dissipation system comprising:

- a shutter, constructed into a wall defining an inside space and an outside space, for opening and closing to control the flow of heat through the shutter from the inside space to the outside space;

- a heat sink located adjacent to the wall in the outside space and adjacent to the shutter, for transferring heat from a first location adjacent to the shutter to a second location; and

- a heat dissipater for dissipating heat from the second location.

13. (original) The system for distributing at least one of information and photonic energy into at least one room of a building of Claim 12, wherein the heat dissipater of the heat dissipation system is one of a radiator and a condenser.

14. (original) The system for distributing at least one of information and photonic energy into at least one room of a building of Claim 1, further comprising a user attachment connectable to a user device, for converting the optical wireless signals into electrical signals compatible with the user device.

15. (original) The system for distributing at least one of information and photonic energy into at least one room of a building of Claim 14, wherein the user attachment comprises:

- an optical holographic diffuser for receiving the optical wireless signals and transmitting the optical wireless signals into a optical fiber;
- a receiver amplifier for amplifying the optical fiber signals; and
- a connector operably connected to the receiver amplifier for connecting to the user device.

16. (original) The system for distributing at least one of information and photonic energy into at least one room of a building of Claim 15, wherein the user attachment further comprises a micro-electro mechanical system (MEMS) mirror for directing the optical wireless signal.

17. (original) The system for distributing at least one of information and photonic energy into at least one room of a building of Claim 15, wherein the user attachment further comprises a transmitter amplifier for amplifying optical fiber signals from the user device for propagation through the optical holographic diffuser into optical wireless signals.

18. (original) The system for distributing at least one of information and photonic energy into at least one room of a building of Claim 17, wherein the user attachment further comprises a micro-electro mechanical system (MEMS) mirror for directing the optical wireless signal.

19. (original) The system for distributing at least one of information and photonic energy into at least one room of a building of Claim 15, wherein the user attachment further

comprises a converter to convert optical fiber signals to and from signals compatible with the user device.

20. (original) The system for distributing at least one of information and photonic energy into at least one room of a building of Claim 1, wherein the lighting generator is comprised of at least two light sources each having a different color.

21. (original) The system for distributing at least one of information and photonic energy into at least one room of a building of Claim 1, wherein quality of service (QoS) classes for transceiving the information signals are comprised of a single user mode and a multi user mode.